

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (currently amended) A self calibrating network comprising:

a first node on a local area network to transmit a first test signal and  
a second test signal; and

a second node on said local area network to receive said first test signal and to adjust a second node transceiver to optimize a transfer of data between said first node and said second node, said adjustment of said second node transceiver being based on at least one of available criteria comprising a noise measurement value, a propagation delay value and a bit rate error value; and

a third node on said local area network to receive said second test signal and to adjust a third node transceiver to optimize a transfer of data between said first node and said third node, said adjustment of said third node transceiver being based on at least one of available criteria comprising a noise measurement value, a propagation delay value and a bit rate error value;

wherein each of said nodes on said local area network have ability to communicate with one another with optimized individualized calibration values for their respective said node transceivers.

2. (currently amended) The self calibrating network according to claim 1, wherein:

said second node stores ~~said~~ a calibration value in a calibration memory.

3. (previously presented) The self calibrating network according to claim 1, wherein:

said test signal contains a node identification associated with said first node.

4. (previously presented) The self calibrating network according to claim 1, wherein:

said second node repeatedly accepts copies of said test signal from said first node until the transfer of data from said first node to said second node is optimized.

5. (previously presented) The self calibrating network according to claim 2, wherein:

said calibration memory stores said calibration value associated with a node identification.

6. (previously presented) The self calibrating network according to claim 1, wherein:

said first node repeatedly transmits a test signal until said second node acknowledges an optimal calibration value has been determined.

7. (previously presented) A self calibrating network, comprising:

a first node to transmit a test signal; and

a second node to receive said test signal and to adjust a second node transceiver to optimize a transfer of data between said first node and said second node, said adjustment of said second node transceiver being based on at least one of available criteria comprising a noise measurement value, a propagation delay value and a bit rate error value;

wherein said one of said first node or said second node issues a network lock command on the network, ceasing nodes other than said first node or said second node from communicating on the network.

8. (previously presented) The self calibrating network according to claim 7, wherein:

said first node or said second node issues an unlock command on the network, giving permission to all nodes on the network to again begin communication.

9. (currently amended) A method for self calibrating a network comprising:

transmitting a first test signal and a second test signal from a first node on a local area network;

receiving said first test signal by a second node on said local area network; ~~and~~

receiving said second test signal by a third node on said local area network;

adjusting a second node transceiver to optimize a transfer of data between said first node and said second node, said adjustment of said second node transceiver being based on at least one of available criteria comprising a noise measurement value, a propagation delay value and a bit rate error value; and

adjusting a third node transceiver to optimize a transfer of data between said first node and said third node, said adjustment of said third node transceiver being based on at least one of available criteria comprising a noise measurement value, a propagation delay value and a bit rate error value;

wherein each of said nodes on said local area network have ability to communicate with one another with optimized individualized calibration values for their respective said node transceivers.

10. (currently amended) The method for self calibrating a network according to claim 9, further comprising:

storing ~~said~~ a calibration value in a calibration memory.

11. (previously presented) The method for self calibrating a network according to claim 9, further comprising:

associating a node identification associated with said first node in said test signal.

12. (previously presented) The method for self calibrating a network according to claim 9, further comprising:

repeatedly accepting copies of said test signal by said second node from said first node until the transfer of data from said first node to said second node is optimized.

13. (previously presented) The method for self calibrating a network according to claim 10, further comprising:

storing in said calibration memory said calibration value associated with a node identification.

14. (previously presented) The method for self calibrating a network according to claim 9, further comprising:

repeatedly transmitting from said first node a test signal until said second node acknowledges an optimal calibration value has been determined.

15. (previously presented) A method for self calibrating a network, comprising:

transmitting a test signal from a first node;

receiving said test signal by a second node;

adjusting a second node transceiver to optimize a transfer of data between said first node and said second node, said adjustment of said second node transceiver being based on at least one of available criteria comprising a noise measurement value, a propagation delay value and a bit rate error value;

issuing from said one of said first node or said second node a network lock command on the network; and

ceasing nodes other than said first node or said second node from communicating on the network.

16. (previously presented) The method for self calibrating a network according to claim 15, further comprising:

issuing from said first node or said second node an unlock command on the network, giving permission to all nodes on the network to again begin communication.

17. (currently amended) A means for self calibrating a network comprising:

transmitter means for transmitting a first test signal and second test signal from a first node on a local area network;

first receiver means for receiving said first test signal from said first node; ~~and~~

second receiver means for receiving said second test signal from said first node; and

a plurality of adjusting means for adjusting a first node transceiver, a second node transceiver and a third node transceiver to ~~optimize a transfer of data between said first node and said second node~~ allow communication between said nodes with optimized individualized calibration values for their respective said node transceivers, said adjustment of said second node transceiver being based on at least one of available criteria comprising a noise measurement value, a propagation delay value and a bit rate error value.

18. (currently amended) The means for self calibrating a network according to claim 17, further comprising:

storage means for storing ~~said~~ a calibration value in a calibration memory.

19. (previously presented) The means for self calibrating a network according to claim 17, further comprising:

associate means for associating a node identification with said first node in said test signal.

20. (previously presented) The means for self calibrating a network according to claim 17, further comprising:

repeated acceptor means for repeatedly accepting copies of said test signal by said second node from said first node until transfer of data from said first node to said second node is optimized.

21. (currently amended) The means for self calibrating a network according to claim 18 ~~[[17]]~~, wherein further comprising:

~~storage means in said calibration memory[[,]]~~ said calibration value being associated with a node identification.

22. (previously presented) The means for self calibrating a network according to claim 17, further comprising:

repeated transmitter means repeatedly transmitting from said first node a test signal until said second node acknowledges an optimal calibration value has been determined.

23. (previously presented) A means for self calibrating a network, comprising:

transmitter means for transmitting a test signal from a first node;

receiver means for receiving said test signal from said first node;

adjust means for adjusting a second node transceiver to optimize a transfer of data between said first node and said second node, said adjustment of said second node transceiver being based on at least one of available criteria comprising a noise measurement value, a propagation delay value and a bit rate error value; and

issue means for issuing from said one of said first node or said second node a network lock command on the network, ceasing nodes other than said first node or said second node from communicating on the network.

24. (previously presented) The means for self calibrating a network according to claim 23, further comprising:

issue means for issuing from said first node or said second node an unlock command on the network, giving permission to all nodes on the network to again begin communication.